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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,486	04/04/2001	Ronald R. Foster	004320.P045	3004
25096	7590	11/05/2003	EXAMINER	
PERKINS COIE LLP			AU, SCOTT D	
PATENT-SEA			ART UNIT	
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SEATTLE, WA 98111-1247			PAPER NUMBER	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/826,486

Applicant(s)

FOSTER, RONALD R.

Examiner

Scott Au

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

The application of Foster for an "Intergrated biometric security system" filed April 4, 2001 has been examined.

Claims 1-11 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "similar" in claim 13 is a relative term which renders the claim indefinite. The term "similar" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. See MPEP 2173.05(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Hundt (US# 6,028,773).

Referring to claim 1, Foster discloses an appliance integrated biometric security system comprising:

An electronic appliance (i.e. electronic appliances consist of cellular phones, laptop computers, card readers, smart card, automobiles and teller machines) (col. 3 lines 13-25); and

an integrated biometric security system including a CMOS image sensor (20), a signal processor (i.e. a microcontroller), and non-volatile memory (i.e. a memory) (col. 5 lines 37-49 and col. 10 lines 26-32).

Referring to claim 2, Foster discloses an appliance integrated biometric security system of claim 1, wherein the signal processor is selected from the group consisting of: a microprocessor; and a digital signal processor (col. 5 lines 37-49 and col. 10 lines 26-32).

Referring to claim 3, Foster discloses an appliance integrated biometric security system of claim 1, wherein the non-volatile memory is a programmable read only memory (col. 10 lines 26-32).

Referring to claim 4, Foster discloses an appliance integrated biometric security system of claim 1, wherein the electronic appliance is selected from the group consisting of: a cell-phone; a pager; a personal-digital-assistant; a laptop computer; and a digital camera (col. 3 lines 15-20).

Referring to claim 5, Foster discloses an appliance integrated biometric security system of claim 1, wherein the non-volatile memory is selected from the group consisting of: electrically erasable programmable read only memory; flash memory; and programmable read only memory (col. 10 lines 29-32).

Referring to claim 6, Foster discloses an appliance integrated biometric security system of claim 1, further including an input/output section for programming the non-volatile memory and for communicating with the electronic appliance. The claim is inherent because the memory is an EEPROMs, there must be an input into the memory and board (14) is for connection to the output devices (col. 10 lines 26-73; see Figure 1B).

Referring to claim 7, Foster discloses an appliance integrated biometric security system of claim 1, wherein the non-volatile memory is used to store a template that identifies an individual authorized to access the electronic appliance (col. 10 lines 17-37).

Referring to claim 8, Foster discloses an appliance integrated biometric security system of claim 1, wherein the non-volatile memory is used to store a plurality of templates, each one of the plurality of templates identifying an individual authorized to access the electronic appliance (col. 10 lines 17-37).

Referring to claim 13, Foster discloses an appliance integrated biometric security system comprising:

A portable, personal electronic appliance having functional hardware; and an integrated biometric security system for authenticating an authorized user of the appliance (col. 3 lines 17-25), including:

a CMOS image sensor for capturing raw image data of a physiological characteristic of a candidate user (col. 5 lines 37-49);

non-volatile memory for storing a template that identifies the authorized user (col. 10 lines 27-32); and

a microprocessor (i.e. a microprocessor or a microcontroller) for extracting a feature set from the raw image data, for comparing the feature set to the template and directing the biometric security system to allow access to the functional hardware of the appliance if the feature set is substantially similar to the template (col. 10 lines 23-32).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hundt (US# 5,267,323) as applied to claim 8 above, and further in view of Maurinus et al. (US# 5,606,365).

Referring to claim 9, Hundt discloses an appliance integrated biometric security system of claim 8. However, Hundt did not explicitly disclose wherein the non-volatile memory stores a pixel defect map.

In the same field of endeavor of image capture system, Maurinus et al. teach wherein the non-volatile memory stores a pixel defect map (col. 5 lines 28-35) in order to identify the defective photosites.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to add that the non-volatile memory stores a pixel defect map of system disclosed by Maurinus et al. into system of Hundt with the motivation for doing so would allow the memory stored information relating to image sensor.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hundt (US# 5,267,323) as applied to claim 1 above, and further in view of Scott et al. (US# 6,111,977).

Referring to claim 10, Hundt discloses an appliance integrated biometric security system of claim 1. However, Hundt did not explicitly disclose the CMOS image sensor consists of:

- a CMOS camera chip;
- a pair of light emitting diodes ;
- a lens;
- a transparent window; and
- an actuateable switch for activating the CMOS camera chip and the light emitting diodes.

In the same field of endeavor of accessing device, Scott et al. teach the CMOS image sensor consists of:

- a CMOS camera chip (39) (i.e. a camera contain CMOS chip) (col. 4 lines 27-41; see Figure 2);
- a pair of light emitting diodes (44) (col. 4 lines 63-64; see Figure 2);
- a lens (38) (col. 4 lines 30-31; see Figure 2);
- a transparent window (22) (col. 3 lines 40-44; see Figure 2); and

an actuateable switch (24) for activating the CMOS camera chip and the light emitting diodes (col. 4 line 55; see Figure 2) in order to recognize the authorized fingerprint to access a security area.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to have the CMOS image sensor consists of: a CMOS camera chip; a pair of light emitting diodes ; a lens; a transparent window; and an actuateable switch for activating the CMOS camera chip and the light emitting diodes of device disclosed by Scott et al. into system of Hundt with the motivation for doing so would allow the biometric security system to identify the authorized ID to access the electronic appliance.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hundt (US# 5,267,323) in view of Scott et al. (US# 6,111,977) as applied to claim 10 above, and further in view of Cairns (US# 4,801,935).

Referring to claim 11, Hundt discloses an appliance integrated biometric security system of claim 10. However, Hundt in view of Scott et al. did not explicitly disclose wherein the actuateable switch is an electro-mechanical switch.

In the same field of endeavor of security of electronic devices, Cairns teaches wherein the actuateable switch is an electro-mechanical switch (86) (col. 19 lines 13-17; see figure 1) in order to serve as a power connection and disconnection of the device.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to add that wherein the actuateable switch is an

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electro-mechanical switch of device disclosed by Cairns into system of Hundt and Scott et al. with the motivation for doing so would allow the actuation of the switch when the finger is applied downward into the transparent window.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hundt (US# 5,267,323) in view of Scott et al. (US# 6,111,977) as applied to claim 10 above, and further in view of Winer (US# 5,459,957).

Referring to claim 12, Hundt discloses an appliance integrated biometric security system of claim 10. However, Hundt in view of Scott et al. did not explicitly disclose wherein the actuateable switch is a capacitive switch.

In the same field of endeavor of security system, Winer teaches wherein the actuateable switch is a capacitive switch (col. 5 lines 54-59) in order to sense the contact is made between the user and the metal surface of the weapon.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to add that wherein the actuateable switch is a capacitive switch of system disclosed by Winer into system of Hundt and Scott et al. with the motivation for doing so would allow finger contacting the conductive surface which utilized the switch to activate imaging and processing of the biometric characteristic.

Double Patenting

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The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-9 and 13 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of (US# 6,441,482) in view of Hundt (US# 6,028,773).

Referring claims 1 and 4, (US# 6,441,482) claims a biometric device formed on an integrated circuit, said biometric device including a CMOS image sensor formed on said integrated circuit, a microprocessor formed on said integrated circuit, and non-volatile memory formed on said integrated circuit. But (US# 6,441,482) does not claim an appliance integrated biometric security system comprising of an electronic appliance is selected from the group consisting of a cell-phone; a pager; a personal-digital-assistant; a laptop; and a digital camera.

However, Hundt discloses in the silicon sensors process system comprise of electronic appliance (col. 3 lines 13-25). Therefore, it would have been obvious to a

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person skilled in the art at the time of the invention was made to include an electronic appliance in the system disclosed by Hundt into system of (US# 6,441,482) with the motivation for doing so would allow the biometric security system connected to the electronic appliance.

Referring to claim 2, corresponding to (US# 6,441,482) claim 1.

Referring to claim 3, corresponding to (US# 6,441,482) claim 2.

Referring to claim 5, corresponding to (US# 6,441,482) claim 3.

Referring to claim 6, corresponding to (US# 6,441,482) claim 4.

Referring to claim 7, corresponding to (US# 6,441,482) claim 5.

Referring to claim 8, corresponding to (US# 6,441,482) claim 6.

Referring to claim 9, corresponding to (US# 6,441,482) claim 7.

Referring to claim 13, corresponding to (US# 6,441,482) claim 8.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kharon et al. (US# 6,487,662) disclose biometric system for biometric input, comparison, authentication and access control and method therefor.

Any inquiry concerning this communication or earlier communications form the examiner should be directed to Scott Au whose telephone number is (703) 305-4680.

The examiner can normally be reached on Mon-Fri, 8:30AM – 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached at (703) 305-4704. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9314 for regular communications and (703)-872-9315 for After Final communications.

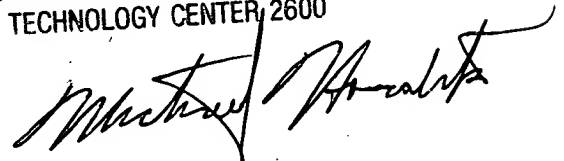
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)-305-3900.

Scott Au

October 7, 2003

SA

MICHAEL HORABIK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

A handwritten signature in black ink, appearing to read "Michael Horabik", is written over the printed name and title.